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JANUARY 1978

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METEOROLOGICAL DATA REPORT

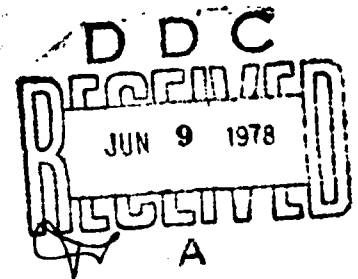
14820A LANCE
MISSILE NO. 3316, ROUND NO. 310 APT
(25 JANUARY 1978)

BY

WSMR METEOROLOGICAL TEAM

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WHITE SANDS MISSILE RANGE, NEW MEXICO



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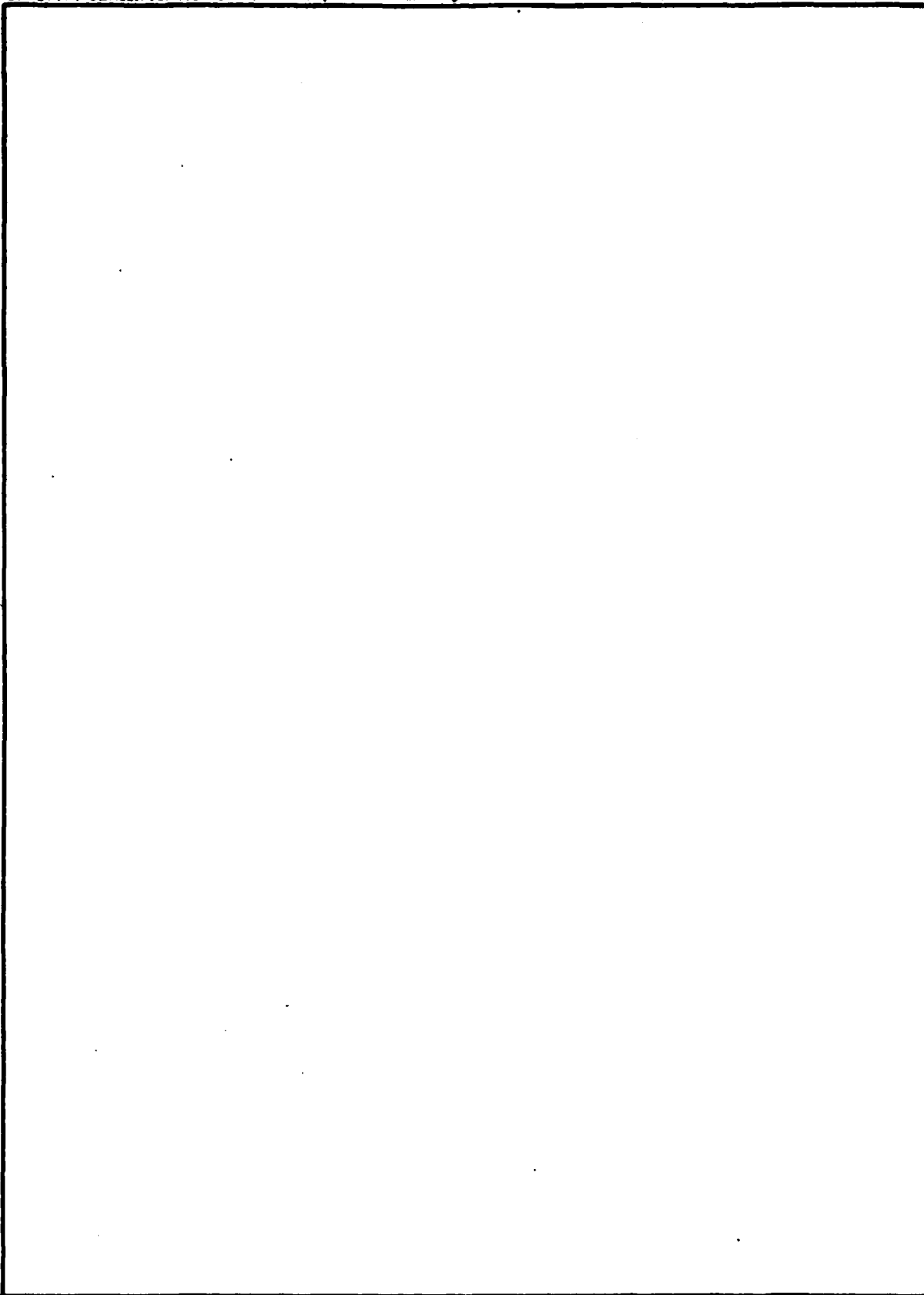
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INTRODUCTION

14820A Lance, Missile Number 3316, Round Number 310 APT, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1600 HRS MST, 25 January 1978. The scheduled launch time was 1545 HRS MST.

DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	3,990	FEET/MSL
PRESSURE	879.4	MBS
TEMPERATURE	9.6	°C
RELATIVE HUMIDITY	26	%
DEW POINT	-8.9	°C
DENSITY	1,080	GM/M ³
WIND SPEED	02	MPH
WIND DIRECTION	360	DEGREES
CLOUD COVER	8	C1

TABLE I. SURFACE OBSERVATIONS TAKEN AT WSD,
AT 1600 HRS MST/25 JANUARY 1978

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	CALM	CALM	2100	272	04.0
100	CALM	CALM	2200	269	04.5
200	CALM	CALM	2300	274	05.0
300	004	01.5	2400	280	06.0
400	008	03.0	2500	282	07.0
500	008	02.5	2600	284	08.0
600	007	02.5	2700	289	10.0
700	007	01.5	2800	295	12.0
800	360	00.5	2900	300	12.5
900	341	01.0	3000	304	13.0
1000	321	01.5	3100	310	14.5
1100	319	02.0	3200	316	16.0
1200	317	02.5	3300	321	17.0
1300	319	02.5	3400	326	18.5
1400	320	03.0	3500	329	19.5
1500	299	02.5	3600	332	20.5
1600	275	02.5	3700	332	22.0
1700	273	02.5	3800	333	24.0
1800	272	02.5	3900	336	26.0
1900	273	03.0	4000	340	28.5
2000	275	03.5	4100	343	29.0

TABLE II. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM LC-39, AT 1600 HRS MST/25 JANUARY 1978
14820A LANCE, MISSILE NO. 3316, ROUND NO. 310 APT

PIBAL RELEASE POINT WSTM COORDINATES:

X = 530,938.82 Y = 186,564.96 Z = 4,063.75

APPROXIMATELY: 1 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	345	31.0	6400	348	41.5
4300	345	30.0	6500	347	42.0
4400	346	30.5	6600	346	42.5
4500	347	31.5	6700	346	42.0
4600	349	32.5	6800	346	42.0
4700	349	33.0	6900	345	41.0
4800	350	35.5	7000	344	40.0
4900	351	35.5	7100	345	41.0
5000	351	35.5	7200	347	42.0
5100	351	36.0	7300	347	41.0
5200	351	36.5	7400	347	40.0
5300	359	35.0	7500	347	39.5
5400	008	34.5	7600	347	39.0
5500	359	35.0	7700	348	36.0
5600	349	36.0	7800	349	33.5
5700	348	37.0	7900	347	34.0
5800	347	38.0	8000	344	35.0
5900	349	38.0	8100	344	35.0
6000	350	38.5	8200	344	35.0
6100	350	40.5	8300	344	34.0
6200	351	43.5	8400	344	33.0
6300	350	42.5			

TABLE II. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

SIGNIFICANT LEVEL DATA
0250020067
WHITE SANDS
TABLE III.

STATION ALTITUDE 3989.00 FEET MSL
25 JAN. 78 1600 HRS MST
ASCENSION NO. 07

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		RELATIVE PERCENT
		AIR DEGREES	WET-BULB CENTIGRADE	
879.4	3989.0	9.7	-9.3	45.0
868.0	4346.0	6.3	-7.6	36.0
850.0	4908.0	4.7	-9.1	36.0
768.8	7565.9	-0.7	-12.3	41.0
750.4	8202.4	.7	-12.0	38.0
700.0	10025.1	-1.6	-14.9	38.0
633.0	12638.5	-4.1	-18.3	32.0
551.0	16184.7	-10.1	-27.7	22.0
500.0	18613.2	-15.4	-32.7	21.0
400.0	23994.8	-28.3	-42.5	24.0
344.6	27441.0	-36.0	-49.2	24.0
300.0	30542.8	-43.5		
250.0	34483.3	-51.8		
224.6	36735.7	-55.7		
200.0	39116.6	-62.1		
184.6	40734.0	-62.7		
167.8	42667.9	-60.3		
150.0	44940.2	-62.7		
134.8	47110.5	-59.2		
112.2	50855.3	-60.6		
100.0	53184.5	-62.7		
70.0	60303.9	-66.0		
63.0	61771.1	-66.6		
60.7	63141.8	-60.6		

GEODETIC COORDINATES
 32-40043 LAT DEG
 106-37033 LON DEG

UPPER AIR DATA
 0250020067
 WHITE SANDS
 TABLE IV.

STATION ALTITUDE 3989.00 FEET MSL
 25 JAN. 78 1600 HRS MST
 ASCENSION NO. 67

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNUTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNUTS	INDEX OF REFRACTION
3989.0	879.4	9.7	-9.3	25.0	1081.7	655.6	10.0	1.9	1.000255
4000.0	879.0	9.6	-9.3	25.3	1081.7	655.5	8.9	1.9	1.000255
4500.0	863.0	5.9	-8.0	36.0	1076.0	651.2	322.2	2.3	1.000256
5000.0	847.1	4.5	-9.2	36.2	1061.3	649.6	299.4	3.6	1.000251
5500.0	831.2	3.5	-9.8	37.1	1045.3	648.4	269.4	5.2	1.000247
6000.0	815.6	2.5	-10.3	38.1	1029.6	647.2	264.1	6.8	1.000244
6500.0	800.4	1.5	-11.0	39.0	1014.1	646.0	269.2	11.5	1.000239
7000.0	785.4	.4	-11.6	39.9	998.6	644.8	293.7	16.2	1.000235
7500.0	770.7	-.6	-12.2	40.9	983.8	643.6	307.3	20.0	1.000231
8000.0	755.2	.3	-12.1	39.0	962.4	644.6	317.3	22.6	1.000227
8500.0	741.9	.3	-12.4	37.7	944.1	644.6	329.9	21.6	1.000222
9000.0	727.9	-.4	-13.2	37.1	928.6	643.8	337.3	24.2	1.000218
9500.0	714.2	-1.1	-14.0	36.6	913.4	642.9	336.6	30.7	1.000214
10000.0	700.7	-1.8	-14.8	36.0	898.5	642.1	334.7	36.8	1.000210
10500.0	687.3	-2.2	-15.5	35.3	882.9	641.6	331.4	42.5	1.000206
11000.0	674.2	-2.7	-16.1	34.5	867.5	641.0	329.7	43.5	1.000202
11500.0	661.4	-3.1	-16.8	33.7	852.4	640.5	329.1	38.7	1.000198
12000.0	648.8	-3.5	-17.5	33.0	837.5	640.0	327.4	35.9	1.000195
12500.0	636.4	-4.0	-18.1	32.2	822.9	639.4	324.2	36.3	1.000191
13000.0	624.1	-4.7	-19.2	31.0	809.3	638.5	321.4	36.7	1.000187
13500.0	612.0	-5.6	-20.5	29.6	796.2	637.5	319.5	37.4	1.000184
14000.0	600.2	-6.4	-21.8	28.2	783.3	636.5	318.2	37.4	1.000180
14500.0	588.5	-7.2	-23.1	26.8	770.6	635.5	316.2	36.0	1.000177
15000.0	577.1	-8.1	-24.4	25.3	758.1	634.4	318.1	35.6	1.000173
15500.0	566.0	-8.9	-25.8	23.9	745.9	633.4	318.0	36.8	1.000170
16000.0	555.0	-9.8	-27.2	22.5	733.8	632.4	317.0	38.8	1.000167
16500.0	544.1	-10.8	-28.3	21.9	722.2	631.2	315.5	41.4	1.000164
17000.0	533.3	-11.9	-29.4	21.7	710.8	629.8	312.9	42.2	1.000161
17500.0	522.8	-13.0	-30.4	21.5	699.7	628.5	309.2	41.8	1.000159
18000.0	512.4	-14.1	-31.4	21.3	688.8	627.2	306.7	41.7	1.000156

UPPER AIR DATA
0250020067
WHITE SANDS
TABLE IV. (CONT)

STATION ALTITUDE 3989.00 FEET MSL
25 JAN. 78
1600 HRS MST
ASCENSION NO. 67

GEOMETRIC ALTITUDE 3989.00 FEET MSL
25 JAN. 78
1600 HRS MST
ASCENSION NO. 67

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
18500.0	502.3	-15.2	21.0	678.0	625.8	305.8	1.000153
19000.0	492.0	-16.3	21.2	667.2	624.4	306.6	1.000151
19500.0	481.9	-17.5	21.5	656.6	622.9	308.9	1.000148
20000.0	472.1	-18.7	21.8	646.2	621.5	309.6	1.000146
20500.0	462.4	-19.9	22.1	635.9	620.0	309.6	1.000143
21000.0	452.9	-21.1	22.3	625.9	618.5	308.1	1.000141
21500.0	443.6	-22.3	22.6	616.0	617.1	306.0	1.000139
22000.0	434.5	-23.5	22.9	606.2	615.6	303.5	1.000136
22500.0	425.6	-24.7	23.2	595.7	614.1	300.9	1.000134
23000.0	416.8	-25.9	23.4	587.3	612.6	297.8	1.000132
23500.0	408.3	-27.1	23.7	578.0	611.1	295.3	1.000130
24000.0	399.9	-28.3	24.0	568.9	609.6	293.6	1.000128
24500.0	391.4	-29.4	24.0	559.3	608.2	292.5	1.000125
25000.0	383.0	-30.5	24.0	549.9	606.8	292.8	1.000123
25500.0	374.8	-31.7	24.0	540.6	605.4	293.0	1.000121
26000.0	366.8	-32.8	24.0	531.5	604.0	293.3	1.000119
26500.0	358.9	-33.9	24.0	522.6	602.6	293.9	1.000117
27000.0	351.2	-35.0	24.0	513.8	601.2	294.8	1.000115
27500.0	343.7	-36.1	23.500	505.1	599.8	295.1	1.000113
28000.0	336.1	-37.4	19.700	496.5	598.2	295.2	1.000111
28500.0	328.7	-38.6	15.800	488.1	596.7	295.0	1.000109
29000.0	321.4	-39.8	11.900	479.8	595.2	294.8	1.000107
29500.0	314.3	-41.0	8.100	471.6	593.6	294.4	1.000105
30000.0	307.4	-42.2	4.200	463.6	592.1	294.0	1.000103
30500.0	300.6	-43.4	.300	455.7	590.5	292.8	1.000102
31000.0	293.7	-44.5		447.4	589.1	291.6	1.000100
31500.0	287.0	-45.5		439.2	587.8	290.3	1.000098
32000.0	280.4	-46.6		431.2	586.4	289.1	1.000096
32500.0	274.0	-47.6		423.3	585.1	288.5	1.000094
33000.0	267.8	-48.7		415.5	583.7	288.0	1.000093

.. AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3489.00 FEET MSL
25 JAN. 78 1600 HRS MST
ASCENSION NO. 67

UPPER AIR DATA
0250020067
WHITE SANDS
TABLE IV. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GLOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC MEER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TH)	SPEED KNOTS	
33500.0	261.6	-49.7		408.0	582.3	288.3	83.9	1.000091
34000.0	255.7	-50.8		400.5	580.9	288.8	88.8	1.000089
34500.0	249.8	-51.8		393.2	579.6	289.3	93.7	1.000088
35000.0	243.9	-52.7		385.5	578.4	289.8	98.7	1.000086
35500.0	238.2	-53.6		377.9	577.3	290.3	101.9	1.000084
36000.0	232.6	-54.4		370.5	576.2	290.7	104.6	1.000083
36500.0	227.1	-55.3		363.2	575.0	291.1	107.2	1.000081
37000.0	221.7	-56.4		356.4	573.5	291.4	109.8	1.000079
37500.0	216.4	-57.8		350.0	571.8	291.4	111.4	1.000078
38000.0	211.2	-59.1		343.7	570.0	291.3	112.7	1.000077
38500.0	206.1	-60.4		337.5	568.2	290.7	112.7	1.000075
39000.0	201.1	-61.8		331.5	566.4	290.0	112.4	1.000074
39500.0	196.2	-62.2		324.1	565.8	288.6	110.8	1.000072
40000.0	191.4	-62.4		316.5	565.5	288.7	107.8	1.000070
40500.0	186.8	-62.6		309.0	565.3	284.8	104.9	1.000069
41000.0	182.2	-62.4		301.1	565.6	282.8	101.7	1.000067
41500.0	177.8	-61.7		292.9	566.4	281.1	99.3	1.000065
42000.0	173.4	-61.1		284.9	567.3	280.5	98.3	1.000063
42500.0	169.2	-60.5		277.2	568.1	280.2	97.6	1.000062
43000.0	165.1	-60.7		270.6	567.9	280.9	98.7	1.000060
43500.0	161.0	-61.2		264.7	567.2	281.7	100.0	1.000059
44000.0	157.1	-61.7		258.9	566.5	282.8	102.2	1.000058
44500.0	153.3	-62.2		253.2	565.8	283.5	102.5	1.000056
45000.0	149.6	-62.6		247.5	565.3	283.3	97.9	1.000055
45500.0	145.9	-61.8		240.5	566.4	282.7	93.4	1.000054
46000.0	142.4	-61.0		233.8	567.4	281.4	88.8	1.000052
46500.0	138.9	-60.2		227.2	568.5	279.8	87.6	1.000051
47000.0	135.5	-59.4		220.9	569.6	278.2	89.4	1.000049
47500.0	132.3	-59.3		215.5	569.6	276.5	91.0	1.000048
48000.0	129.1	-59.5		210.5	569.4	275.0	92.6	1.000047

STATION ALTITUDE 3989.00 FEET MSL
25 JAN. 78 1600 HRS MST
ASCENSION NO. 67

UPPER AIR DATA
0250020067
WHITE SANDS
TABLE IV. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
48500.0	125.9	-59.7		205.5	569.1	274.0	90.0	1.0000040
49000.0	122.9	-59.9		200.7	568.9	273.1	88.0	1.0000045
49500.0	119.9	-60.1		196.1	568.6	273.2	84.2	1.0000044
50000.0	117.0	-60.3		191.5	568.4	273.5	80.0	1.0000043
50500.0	114.2	-60.5		187.0	568.1	275.7	79.7	1.0000042
51000.0	111.4	-60.7		182.7	567.8	278.2	80.1	1.0000041
51500.0	108.7	-61.2		178.6	567.2	280.7	82.2	1.0000040
52000.0	106.0	-61.6		174.6	566.6	283.1	84.6	1.0000039
52500.0	103.4	-62.1		170.7	566.0	283.8	81.5	1.0000038
53000.0	100.9	-62.5		166.9	565.4	284.4	77.5	1.0000037
53500.0	98.4	-62.8		163.1	565.0	284.3	69.4	1.0000036
54000.0	96.0	-63.1		159.2	564.7	284.0	60.7	1.0000035
54500.0	93.6	-63.3		155.4	564.3	284.0	56.0	1.0000036
55000.0	91.3	-63.5		151.8	564.0	284.1	52.0	1.0000034
55500.0	89.0	-63.8		148.2	563.7	283.5	45.7	1.0000033
56000.0	86.8	-64.0		144.7	563.4	282.2	38.2	1.0000032
56500.0	84.7	-64.2		141.2	563.1	279.6	29.6	1.0000031
57000.0	82.6	-64.5		137.9	562.8	273.9	19.4	1.0000031
57500.0	80.6	-64.7		134.6	562.5	263.1	12.2	1.0000030
58000.0	78.6	-64.9		131.5	562.2	269.2	15.3	1.0000029
58500.0	76.6	-65.2		128.3	561.8	273.1	16.6	1.0000029
59000.0	74.7	-65.4		125.3	561.5	278.5	26.5	1.0000028
59500.0	72.9	-65.6		122.3	561.2	281.6	35.4	1.0000027
60000.0	71.1	-65.9		119.5	560.9	283.0	40.6	1.0000027
60500.0	69.3	-66.1		116.6	560.6	283.7	41.8	1.0000026
61000.0	67.6	-66.3		113.8	560.3	284.4	42.4	1.0000025
61500.0	65.9	-66.5		111.1	560.0	285.0	38.6	1.0000025
62000.0	64.3	-66.6		107.9	561.3	285.7	34.6	1.0000024
62500.0	62.7	-66.4		104.1	564.2			1.0000023
63000.0	61.1	-61.2		100.5	567.1			1.0000022

STATION ALTITUDE 3989.00 FEET MSL
25 JAN. 78
ASCENSION NO. 67

MANDATORY LEVELS
0250020067
WHITE SANDS
TABLE V.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	WET POINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4907.	4.7	-9.1	30.	302.3	3.4
800.0	6518.	1.4	-11.0	39.	209.4	11.7
750.0	8210.	.7	-12.0	30.	322.7	22.0
700.0	10025.	-1.8	-14.9	30.	334.5	37.1
650.0	11953.	-3.5	-17.4	33.	327.7	35.9
600.0	14019.	-6.4	-21.6	28.	316.2	37.3
550.0	16235.	-10.2	-27.8	22.	316.2	40.0
500.0	18621.	-15.4	-32.7	21.	805.6	41.6
450.0	21200.	-21.5	-37.2	24.	807.2	39.4
400.0	24011.	-28.3	-42.5	24.	243.4	40.0
350.0	27109.	-35.2	-48.5	24.	295.0	55.7
300.0	30573.	-43.5			292.5	63.9
250.0	34523.	-51.8			209.4	94.5
200.0	39171.	-62.1			209.6	112.1
175.0	41877.	-61.4			200.6	98.3
150.0	45015.	-62.7			203.3	96.9
125.0	48744.	-59.8			273.4	88.8
100.0	53294.	-62.7			204.3	70.6
80.0	57785.	-64.8			200.6	15.0
70.0	60451.	-66.0			203.9	42.1

.. AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
33.61920 LAT DEG
106.66591 LON DEG

SIGNIFICANT LEVEL DATA
0250040020
STALLION
TABLE VI.

STATION ALTITUDE 4940.00 FEET MSL
20 JAN. 78 1600 HRS MST
ASCENSION NO. 20

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	WET POINT CENTIGRADE	
848.4	4940.0	5.7	-1.9	58.0
844.5	5066.9	3.5	-10.5	35.0
806.3	6290.9	.0	-12.6	38.0
786.8	6935.8	1.4	-12.4	35.0
764.3	7700.4	.4	-14.0	33.0
700.0	9988.4	-5.1	-17.8	36.0
571.8	15142.7	-10.8	-28.3	22.0
500.0	18480.5	-17.3	-37.0	16.0
475.3	19719.4	-14.4	-40.0	14.0
400.0	23827.6	-30.4	-49.1	14.0
300.0	30304.6	-46.5		
250.0	34180.2	-56.4		
235.8	35385.3	-54.7		
200.0	38738.1	-61.5		
141.3	39635.8	-63.3		
174.3	41517.1	-60.8		
150.0	44575.3	-60.0		
141.3	45790.0	-61.5		
136.5	46495.7	-58.1		
100.0	52805.0	-64.3		
70.0	59948.6	-63.1		
61.2	62628.9	-65.7		
58.0	63703.2	-61.9		
51.3	66158.3	-65.7		
50.0	66700.3	-62.9		
50.0	76982.8	-60.5		
25.5	80277.6	-60.0		
20.0	85251.4	-56.2		
16.3	89482.2	-56.2		

GEODETIC COORDINATES
33.81920 LAT DEG
100.06501 LONG DEG

UPPER AIR DATA
0250040020
STALLION
TABLE VII.

STATION ALTITUDE 4940.00 FEET MSL
25 JAN. 78
1600 HRS MST
ASCENSION NO. 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (T)	SPEED KNOTS	
4940.0	846.4	5.7	58.0	1057.4	651.5	250.0	8.0	1.000261
5000.0	846.6	4.7	47.1	1059.7	649.9	254.9	7.9	1.000256
5500.0	830.8	2.3	36.1	1049.6	646.9	290.1	9.8	1.000247
6000.0	815.2	.8	37.5	1035.4	645.2	309.3	14.0	1.000243
6500.0	799.9	.5	37.0	1017.4	644.8	319.1	18.4	1.000238
7000.0	784.9	1.3	34.8	995.1	645.8	326.0	23.2	1.000233
7500.0	770.1	.7	33.5	978.8	645.0	331.9	26.9	1.000229
8000.0	755.6	-.3	33.4	965.8	643.8	335.8	29.0	1.000225
8500.0	741.2	-1.5	34.0	949.7	642.4	338.7	27.4	1.000221
9000.0	727.1	-2.7	34.7	935.8	640.9	340.9	26.9	1.000217
9500.0	713.3	-3.9	35.4	922.1	639.5	340.7	26.0	1.000214
10000.0	699.7	-5.1	36.0	908.8	636.1	338.6	27.4	1.000210
10500.0	686.1	-5.7	34.6	892.6	637.4	336.0	29.9	1.000206
11000.0	672.8	-6.2	33.3	877.4	636.7	335.0	30.4	1.000202
11500.0	659.7	-6.8	31.9	862.1	636.0	336.7	29.2	1.000198
12000.0	646.9	-7.3	30.5	847.2	635.4	340.4	26.9	1.000194
12500.0	634.3	-7.9	29.2	832.5	634.7	339.2	27.9	1.000191
13000.0	622.0	-8.4	27.8	818.0	634.0	334.8	30.2	1.000187
13500.0	609.9	-9.0	26.5	803.9	633.3	329.3	34.1	1.000184
14000.0	596.0	-9.5	25.1	789.9	632.7	324.3	37.0	1.000180
14500.0	586.4	-10.1	23.7	776.2	632.0	322.0	39.4	1.000177
15000.0	575.0	-10.6	22.4	762.8	631.3	321.9	40.8	1.000173
15500.0	563.5	-11.5	21.4	750.2	630.3	321.2	44.1	1.000170
16000.0	552.4	-12.5	20.5	738.0	629.1	320.3	47.4	1.000167
16500.0	541.4	-13.4	19.6	726.1	627.9	319.1	49.0	1.000164
17000.0	530.7	-14.4	18.7	714.3	626.7	316.6	49.4	1.000161
17500.0	520.1	-15.4	17.8	702.8	625.5	313.6	49.7	1.000158
18000.0	509.8	-16.4	16.9	691.4	624.3	310.6	50.3	1.000156
18500.0	499.6	-17.3	16.0	680.2	623.2	308.2	51.0	1.000153
19000.0	489.5	-18.2	15.2	668.7	622.1	306.7	51.5	1.000150

STATION ALTITUDE 4940.00 FEET MSL
25 JAN. 78 1600 HRS MST
ASCENSION NO. 20

UPPER AIR DATA
0250040020
STATION
TABLE VII. (CONT)

GEODETIC COORDINATES
35.31920 LAT DEG
106.66501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TA)	SPEED KNOTS	
19500.0	479.6	-19.0	14.4	657.3	621.1	305.2	51.5	1.000146
20000.0	469.7	-20.2	14.0	646.7	619.7	303.5	51.1	1.000145
20500.0	460.0	-21.5	14.0	636.7	618.1	301.9	50.4	1.000143
21000.0	450.4	-22.8	14.0	626.6	616.4	300.3	49.5	1.000140
21500.0	441.1	-24.2	14.0	617.1	614.8	299.2	49.8	1.000138
22000.0	431.9	-25.5	14.0	607.5	613.1	298.2	50.2	1.000136
22500.0	422.7	-26.8	14.0	598.1	611.4	297.2	50.3	1.000134
23000.0	414.1	-28.2	14.0	588.9	609.8	296.1	50.4	1.000132
23500.0	405.5	-29.5	14.0	579.6	608.1	295.0	50.5	1.000130
24000.0	396.9	-30.8	13.6**	570.6	606.5	294.1	50.7	1.000128
24500.0	388.2	-32.1	12.5**	560.9	604.9	293.1	51.0	1.000125
25000.0	379.7	-33.3	11.5**	551.4	603.4	292.3	51.9	1.000123
25500.0	371.4	-34.5	10.4**	542.1	601.6	291.6	52.7	1.000121
26000.0	363.2	-35.7	9.3**	532.9	600.3	291.2	53.9	1.000119
26500.0	355.2	-37.0	8.2**	523.9	598.7	291.0	55.3	1.000117
27000.0	347.4	-38.2	7.1**	515.1	597.2	292.6	58.1	1.000115
27500.0	339.8	-39.4	6.1**	506.4	595.6	294.1	60.8	1.000113
28000.0	332.3	-40.6	5.0**	497.9	594.0	295.1	61.9	1.000111
28500.0	325.0	-41.9	3.9**	489.6	592.5	296.1	63.1	1.000109
29000.0	317.9	-43.1	2.8**	481.4	590.9	295.9	62.3	1.000107
29500.0	310.9	-44.3	1.7**	473.3	589.5	295.3	61.1	1.000105
30000.0	304.1	-45.6	.7**	465.4	587.7	294.7	60.1	1.000104
30500.0	297.3	-46.8		457.5	586.1	293.9	59.5	1.000102
31000.0	290.3	-48.1		449.5	584.4	293.3	59.5	1.000100
31500.0	283.6	-49.4		441.6	582.7	293.0	60.5	1.000098
32000.0	277.0	-50.7		433.8	581.0	292.7	62.3	1.000097
32500.0	270.6	-52.0		426.2	579.3	292.4	64.4	1.000095
33000.0	264.3	-53.3		418.8	577.6	292.1	66.4	1.000093
33500.0	258.1	-54.6		411.5	575.9	292.0	69.0	1.000092
34000.0	252.1	-55.9		404.3	574.2	291.9	71.7	1.000090

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
 0250040020
 STALLION
 TABLE VI'. (CONT)

STATION ALTITUDE 4940.00 FEET MSL
 25 JAN. 78
 ASCENSION NO. 20

GEODETIC COORDINATES
 33.61920 LAT DEG
 106.66501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIPARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF		WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
						SCUND	KNOTS			
34500.0	246.2	-57.3			397.2	572.4		292.0	75.3	1.000088
35000.0	240.3	-58.6			390.2	570.6		292.2	79.6	1.000087
35500.0	234.5	-59.8			382.8	569.1		292.3	83.7	1.000085
36000.0	228.8	-60.0			374.0	568.7		292.2	87.5	1.000083
36500.0	223.2	-60.3			365.4	568.4		292.1	91.0	1.000081
37000.0	217.8	-60.6			357.0	568.0		291.8	93.7	1.000079
37500.0	212.5	-60.8			348.7	567.7		291.5	96.4	1.000076
38000.0	207.4	-61.1			340.7	567.3		291.3	97.8	1.000076
38500.0	202.4	-61.4			332.9	566.9		291.1	99.2	1.000074
39000.0	197.4	-62.0			325.3	566.1		290.6	98.2	1.000073
39500.0	192.6	-63.0			319.3	564.7		290.0	95.2	1.000071
40000.0	187.9	-62.6			311.2	565.0		289.3	92.2	1.000069
40500.0	183.3	-62.2			302.6	565.9		288.0	88.9	1.000067
41000.0	178.8	-61.5			294.3	566.8		286.5	85.6	1.000066
41500.0	174.4	-60.8			286.2	567.7		285.3	84.4	1.000064
42000.0	170.2	-60.7			279.1	567.9		284.4	84.0	1.000062
42500.0	166.1	-60.5			272.1	568.0		283.3	82.8	1.000061
43000.0	162.1	-60.4			265.4	568.2		282.3	80.8	1.000059
43500.0	158.1	-60.3			258.6	568.4		281.2	79.1	1.000058
44000.0	154.3	-60.2			252.4	568.6		280.3	78.1	1.000056
44500.0	150.6	-60.0			246.1	568.7		279.5	77.6	1.000055
45000.0	146.9	-60.5			240.7	568.1		278.9	78.2	1.000054
45500.0	143.3	-61.1			235.5	567.2		278.5	79.0	1.000052
46000.0	139.9	-60.5			229.1	568.1		278.4	79.8	1.000051
46500.0	136.5	-58.1			221.1	571.3		278.5	80.5	1.000049
47000.0	133.1	-58.6			216.2	570.6		279.1	80.0	1.000048
47500.0	129.9	-59.1			211.4	570.0		279.7	79.6	1.000047
48000.0	126.1	-59.6			206.7	569.5		279.6	76.2	1.000046
48500.0	123.7	-60.1			202.2	568.7		279.4	72.7	1.000045
49000.0	120.6	-60.6			197.7	568.0		279.2	70.6	1.000044

UPPER AIR DATA
0250040020
STATION
TABLE VII. (CONT)

STATION ALTITUDE 4940.00 FEET MSL
25 JAN. 78 1600 HRS MST
ASCENSION NO. 20

GEOMETRIC COORDINATES
33.81920 LAT NEG
106.66501 LONG NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (T)	SPEED KNOTS	
49500.0	117.7	-61.1		193.3	567.4	279.0	68.7	1.000043
50000.0	114.6	-61.5		189.1	560.7	279.3	66.3	1.000042
50500.0	112.0	-62.0		184.9	556.1	280.0	66.9	1.000041
51000.0	109.3	-62.5		180.6	551.4	280.7	69.4	1.000040
51500.0	106.6	-63.0		176.8	547.7	281.0	67.6	1.000039
52000.0	104.1	-63.5		172.9	544.1	281.3	65.8	1.000039
52500.0	101.5	-64.0		169.1	540.4	281.4	62.9	1.000038
53000.0	99.0	-64.3		165.2	536.1	281.3	59.0	1.000037
53500.0	96.6	-64.2		161.0	532.2	281.2	55.2	1.000036
54000.0	94.2	-64.1		157.0	528.5	281.4	52.1	1.000035
54500.0	91.9	-64.0		153.1	525.4	281.7	49.0	1.000034
55000.0	89.6	-63.9		149.2	523.5	282.8	47.4	1.000033
55500.0	87.4	-63.8		145.5	522.6	284.0	45.9	1.000032
56000.0	85.3	-63.8		141.8	521.7	286.2	43.6	1.000032
56500.0	83.2	-63.7		138.3	520.8	288.7	41.2	1.000031
57000.0	81.1	-63.6		134.8	520.0	291.1	39.4	1.000030
57500.0	79.1	-63.5		131.4	520.1	293.6	37.9	1.000029
58000.0	77.2	-63.4		128.2	520.2	295.5	36.8	1.000029
58500.0	75.3	-63.3		124.9	520.3	295.3	36.6	1.000028
59000.0	73.4	-63.3		121.8	520.4	295.2	36.4	1.000027
59500.0	71.6	-63.2		118.8	520.5	295.0	35.3	1.000026
60000.0	69.8	-63.1		115.5	520.6	290.5	34.2	1.000026
60500.0	68.1	-63.6		113.2	523.9	288.1	33.0	1.000025
61000.0	66.4	-64.1		110.7	523.2	285.7	31.8	1.000025
61500.0	64.6	-64.6		108.2	522.6	283.1	30.4	1.000024
62000.0	63.2	-65.1		105.8	521.9	282.9	30.3	1.000024
62500.0	61.6	-65.6		103.4	521.5	282.7	30.1	1.000023
63000.0	60.1	-64.4		100.2	520.9	283.0	29.6	1.000022
63500.0	58.6	-62.8		97.0	525.5	283.9	28.7	1.000022
64000.0	57.1	-62.4		94.4	525.6	284.8	27.7	1.000021

STATION ALTITUDE 4940.00 FEET MSL
25 JAN. 76 1600 HRS MST
ASCENSION NO. 20

UPPER AIR DATA
J250040J20
STATION
TABLE VII. (CONT)

GEODETIC COORDINATES
33.81920 LAT DEG
104.66501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				LIFTING DEGREES (VA)	SPEED KNOTS	
64500.0	55.7	-63.1			92.4	504.6	264.3	23.1	1.000021
65000.0	54.4	-63.9			90.3	503.2	263.4	16.2	1.000020
65500.0	53.0	-64.7			88.6	502.2	260.8	13.5	1.000020
66000.0	51.7	-65.5			86.7	501.4	273.0	8.2	1.000019
66500.0	50.4	-65.6			83.9	503.6	244.4	3.7	1.000019
67000.0	49.2	-62.8			81.5	505.0	237.1	2.4	1.000018
67500.0	48.0	-62.7			79.4	505.1	216.4	1.3	1.000018
68000.0	46.8	-62.6			77.5	503.3	292.2	1.9	1.000017
68500.0	45.7	-62.5			75.5	505.5	209.3	6.1	1.000017
69000.0	44.6	-62.4			73.6	505.6	312.4	10.4	1.000016
69500.0	43.5	-62.2			71.8	505.8	214.9	13.6	1.000016
70000.0	42.4	-62.1			70.0	505.9	316.4	16.9	1.000016
70500.0	41.4	-62.0			68.2	506.1	217.7	19.6	1.000015
71000.0	40.3	-61.9			66.5	506.2	319.5	20.1	1.000015
71500.0	39.4	-61.8			64.9	506.4	221.2	20.5	1.000014
72000.0	38.4	-61.7			63.2	506.6	322.6	20.5	1.000014
72500.0	37.5	-61.5			61.7	506.7	223.6	19.2	1.000014
73000.0	36.5	-61.4			60.1	506.9	324.8	18.0	1.000013
73500.0	35.6	-61.3			58.6	507.0	227.7	15.8	1.000013
74000.0	34.6	-61.2			57.2	507.2	334.2	12.7	1.000013
74500.0	33.9	-61.1			55.7	507.3	244.5	9.9	1.000012
75000.0	33.1	-61.0			54.3	507.5	10.2	7.3	1.000012
75500.0	32.3	-60.8			53.0	507.6	21.6	7.5	1.000012
76000.0	31.5	-60.7			51.7	507.8	78.7	10.7	1.000012
76500.0	30.7	-60.6			50.4	508.0	89.9	14.2	1.000011
77000.0	30.0	-60.5			49.1	508.1	96.0	17.7	1.000011
77500.0	29.2	-60.5			47.9	506.0	100.1	21.4	1.000011
78000.0	28.5	-60.6			46.8	508.0	101.3	21.5	1.000010
78500.0	27.6	-60.6			45.6	507.9	102.5	21.4	1.000010
79000.0	27.2	-60.7			44.5	507.9	103.4	21.0	1.000010

UPPER AIR DATA
 U250040020
 STATION
 TABLE VII. (CONT)

STATION ALTITUDE 4940.00 FEET MSL
 25 JAN. 76 1600 HRS MST
 ASCENSION NO. 20

GEODETIC COORDINATES
 33.81920 LAT DEG
 106.66501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
79500.0	26.5	-60.7			42.5	567.6	104.3	18.7	1.000010
80000.0	25.9	-60.8			42.4	567.7	105.4	16.4	1.000009
80500.0	25.2	-60.6			41.3	568.0	105.8	14.1	1.000009
81000.0	24.6	-60.1			40.3	568.6	103.6	11.9	1.000009
81500.0	24.0	-59.7			39.2	569.2	100.5	9.6	1.000009
82000.0	23.4	-59.2			38.2	569.8	89.9	8.1	1.000008
82500.0	22.9	-58.7			37.2	570.4	71.7	7.7	1.000006
83000.0	22.3	-58.3			36.2	571.1	53.8	8.2	1.000006
83500.0	21.8	-57.8			35.2	571.7	41.6	9.4	1.000006
84000.0	21.3	-57.4			34.3	572.3	53.7	11.0	1.000006
84500.0	20.7	-56.9			33.4	572.9	27.8	12.8	1.000007
85000.0	20.2	-56.4			32.5	573.5	11.4	13.6	1.000007
85500.0	19.8	-56.2			31.7	573.6	55.9	15.3	1.000007
86000.0	19.3	-56.2			31.0	573.8			1.000007
86500.0	18.8	-56.2			30.2	573.8			1.000007
87000.0	18.4	-56.2			29.5	573.8			1.000007
87500.0	17.9	-56.2			28.8	573.8			1.000006
88000.0	17.5	-56.2			28.1	573.8			1.000006
88500.0	17.1	-56.2			27.4	573.8			1.000006
89000.0	16.7	-56.2			26.8	573.8			1.000006

STATION ALTITUDE 4940.00 FEET MSL
25 JAN. 76 1600 HRS MST
ASCENSION NO. 2J

WIND DATA
0250040020
STATION
TABLE VIII.

GEOMETRIC COORDINATES
33.81920 LAT DEG
106.66501 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
800.0	6497.	.4	-12.5	37.	315.1	10.9
750.0	6196.	-0.8	-14.6	34.	327.0	20.5
700.0	5989.	-5.1	-17.6	30.	338.6	27.4
650.0	5782.	-7.2	-21.4	31.	340.0	27.1
600.0	5575.	-9.4	-25.6	25.	324.8	36.7
550.0	5368.	-12.7	-30.8	20.	319.9	40.0
500.0	5161.	-17.3	-37.0	16.	308.2	51.0
450.0	4954.	-22.9	-42.9	14.	303.0	49.4
400.0	4747.	-30.4	-49.1	14.	294.3	50.6
350.0	4540.	-37.8	-60.1	8.**	292.5	57.8
300.0	4333.	-46.3			294.1	59.7
250.0	4126.	-56.4			291.9	73.4
200.0	3919.	-61.2			290.8	99.0
175.0	3712.	-60.9			285.2	84.3
150.0	3505.	-60.0			275.2	77.9
125.0	3298.	-59.9			274.4	72.7
100.0	3091.	-64.3			281.3	56.6
80.0	2884.	-63.5			293.9	37.7
70.0	2677.	-63.1			285.2	33.6
60.0	2470.	-64.3			283.7	26.9
50.0	2263.	-62.9			255.3	2.3
40.0	2056.	-61.9			321.6	20.7
30.0	1849.	-60.5			100.5	21.6
25.0	1642.	-60.4			102.0	10.6
20.0	1435.	-56.2			345.8	17.5

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
25 JAN. 78 1700 HRS MST
ASCENSION NO. 55

SIGNIFICANT LEVEL DATA
0250010055
HOLLOWMAN
TABLE IX.

GEOMETRIC COORDINATES
32.88865 LAT NEG
106.09965 LON DEG

PRESSURE GEOMETRIC		TEMPERATURE		REL. HUM. PERCENT
MILLIBARS	ALTITUDE MSL FEET	AIR DEGREES	DWPOINT CENTIGRADE	
875.5	4126.6	5.4	-1.0	59.0
866.1	4419.6	4.6	-9.0	30.0
850.0	4920.0	3.0	-9.7	38.0
792.8	6760.1	-0.2	-11.8	41.0
788.6	6899.6	.0	-11.4	42.0
700.0	10006.2	-4.2	-16.1	39.0
659.3	11547.0	-6.9	-19.7	35.0
644.5	12128.9	-6.0	-20.7	30.0
580.8	14783.3	-9.3	-24.2	18.0
500.0	18526.5	-16.5	-36.3	16.0
484.3	19309.9	-18.1	-37.7	16.0
400.0	23879.2	-30.2	-47.2	17.0
360.3	25048.9	-33.2	-49.3	16.0
300.0	30376.5	-44.6		
250.0	34289.9	-53.8		
200.0	38683.0	-62.6		
188.8	40038.8	-64.7		
180.8	40913.9	-59.5		
150.0	44710.4	-61.5		
143.3	45639.4	-62.6		
126.3	48191.4	-61.2		
120.3	49178.6	-61.2		
116.3	49866.0	-59.8		
100.0	52925.6	-63.0		
78.8	57668.4	-67.0		
70.0	60010.1	-65.6		
58.3	63652.0	-64.0		
50.0	66719.4	-64.2		
44.3	69142.0	-63.0		

STATION ALTITUDE +120.59 FEET ASL
25 JAN. 78 1700 HRS MST
ASCENSION NO. 50

UPPER AIR DATA
0250010055
HOLLOMAN
TABLE X.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4120.0	875.5	5.9	-1.5	55.0	1090.4	651.0	300.0	4.1	1.000270
4500.0	863.5	4.5	-9.1	36.3	1081.9	649.0			1.000256
5000.0	847.4	2.9	-10.0	36.1	1068.2	647.6			1.000252
5500.0	831.5	2.0	-10.5	38.9	1051.5	646.6			1.000246
6000.0	815.9	1.1	-11.0	39.8	1035.1	645.0			1.000244
6500.0	800.6	.3	-11.6	40.6	1019.0	644.5			1.000240
7000.0	785.6	-.1	-11.5	41.4	1001.2	644.1			1.000236
7500.0	770.6	-.8	-12.5	41.4	984.6	643.3			1.000232
8000.0	756.0	-1.5	-13.0	40.9	968.4	642.5			1.000227
8500.0	741.0	-2.2	-13.8	40.5	952.4	641.7			1.000223
9000.0	727.5	-2.8	-14.5	40.0	936.7	640.0			1.000219
9500.0	713.7	-3.5	-15.3	39.5	921.2	640.0			1.000215
10000.0	700.2	-4.2	-16.0	39.0	906.0	639.2	328.1	18.9	1.000211
10500.0	686.7	-5.1	-17.2	37.7	891.6	636.1	328.2	29.9	1.000207
11000.0	673.5	-5.9	-18.4	36.4	877.3	637.1	328.5	36.2	1.000203
11500.0	660.5	-6.8	-19.6	35.1	863.3	636.0	328.9	35.0	1.000199
12000.0	647.8	-6.2	-20.5	31.1	844.7	636.7	329.0	34.1	1.000195
12500.0	635.2	-6.5	-21.8	26.3	829.2	636.4	327.4	34.6	1.000190
13000.0	622.9	-7.1	-23.3	26.1	815.1	635.6	325.6	35.3	1.000187
13500.0	610.8	-7.7	-24.6	25.8	801.2	634.5	323.5	36.3	1.000183
14000.0	596.9	-8.3	-26.4	21.5	787.5	634.1	321.9	36.9	1.000179
14500.0	587.3	-8.9	-28.1	19.3	774.1	633.4	320.6	37.2	1.000176
15000.0	575.8	-9.7	-29.6	17.9	761.2	632.4	319.2	39.6	1.000172
15500.0	564.4	-10.7	-30.5	17.6	748.6	631.5	318.0	41.8	1.000169
16000.0	553.2	-11.0	-31.5	17.3	736.7	630.1	316.6	42.8	1.000167
16500.0	542.2	-12.6	-32.5	17.1	724.8	628.9	314.4	43.5	1.000164
17000.0	531.5	-13.0	-33.4	16.8	713.1	627.8	311.0	43.6	1.000161
17500.0	521.0	-14.5	-34.4	16.5	701.6	626.6	307.6	44.1	1.000158
18000.0	510.6	-15.5	-35.5	16.3	690.3	625.4	304.4	44.9	1.000155
18500.0	500.5	-16.4	-36.5	16.0	679.1	624.2	302.8	44.7	1.000153

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

UPPER AIR DATA
 0250010055
 40LLONAM
 TABLE X. (CONT)

STATION ALTITUDE 4126.59 FEET MSL
 25 JAN. 78
 ASCENSION NO. 55

GEOPHTIC COORDINATES
 32.88865 LAT NFG
 106.04965 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
19000.0	490.5	-17.5	-37.1	16.0	668.1	623.0	301.9	43.9	1.000150
19500.0	480.5	-18.6	-38.1	16.0	657.4	621.6	301.9	43.5	1.000148
20000.0	470.5	-19.9	-39.1	16.2	647.2	620.0	302.2	43.2	1.000145
20500.0	460.6	-21.3	-40.1	16.5	637.1	618.4	303.0	43.9	1.000143
21000.0	451.2	-22.8	-41.2	16.4	627.2	616.7	303.2	44.7	1.000141
21500.0	441.9	-23.9	-42.2	16.5	617.5	615.1	302.3	45.8	1.000136
22000.0	432.7	-25.2	-43.3	16.6	606.3	613.5	300.7	46.9	1.000130
22500.0	423.6	-26.5	-44.3	16.7	596.6	611.8	298.6	47.9	1.000134
23000.0	415.0	-27.9	-45.4	16.8	589.4	610.2	296.6	48.9	1.000132
23500.0	406.4	-29.2	-46.4	16.9	580.3	608.5	294.7	49.9	1.000130
24000.0	397.9	-30.5	-47.4	17.1	571.3	606.9	293.0	51.1	1.000128
24500.0	389.4	-31.8	-48.3	17.5	562.0	605.3	291.5	52.4	1.000126
25000.0	381.1	-33.1	-49.2	18.0	553.0	603.6	291.4	53.3	1.000124
25500.0	372.7	-34.2	-50.8	18.5**	543.3	602.3	291.4	54.2	1.000121
26000.0	364.5	-35.2	-52.6	14.8**	533.7	600.9	292.1	54.7	1.000119
26500.0	356.3	-36.3	-54.5	15.1**	524.4	599.6	292.8	55.0	1.000117
27000.0	348.7	-37.4	-56.5	11.4**	515.1	598.2	293.1	54.3	1.000115
27500.0	341.0	-38.4	-58.7	9.7**	506.1	596.6	293.2	53.5	1.000113
28000.0	333.5	-39.5	-61.0	8.0**	497.2	595.5	292.7	52.1	1.000111
28500.0	326.1	-40.6	-63.6	6.3**	488.5	594.1	292.1	51.0	1.000109
29000.0	319.0	-41.7	-66.7	4.7**	480.0	592.7	291.2	50.6	1.000107
29500.0	311.9	-42.7	-70.6	3.0**	471.6	591.4	290.1	50.7	1.000105
30000.0	305.1	-43.8	-76.9	1.5**	463.4	590.0	288.8	51.3	1.000103
30500.0	298.3	-44.9			455.2	588.6	288.7	56.0	1.000101
31000.0	291.4	-46.1			447.0	587.1	289.0	62.4	1.000100
31500.0	284.7	-47.2			439.0	585.5	289.7	67.8	1.000098
32000.0	278.1	-48.4			431.2	584.0	290.2	73.1	1.000096
32500.0	271.7	-49.6			423.4	582.5	290.4	77.0	1.000094
33000.0	265.5	-50.6			415.9	581.0	290.1	78.9	1.000093
33500.0	259.4	-51.9			408.5	579.4	289.9	80.9	1.000091

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.54 FEET MSL
25 JAN. 78 1700 HRS MST
ASCENSION NO. 55

UPPER AIR DATA
0250010055
HOLLOMAN
TABLE X. (CONT)

GEODETIC COORDINATES
32.88865 LAT NEG
106.09965 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
34000.0	253.4	-53.1		401.2	577.9	289.6	82.9	1.000089
34500.0	247.5	-54.2		393.7	576.4	289.3	85.0	1.000086
35000.0	241.5	-55.2		386.0	575.2	289.3	88.1	1.000086
35500.0	235.7	-56.2		378.5	573.9	289.4	91.9	1.000084
36000.0	230.1	-57.2		371.1	572.6	289.5	95.7	1.000083
36500.0	224.5	-58.1		363.8	571.3	289.6	99.5	1.000081
37000.0	219.2	-59.1		356.7	570.0	289.7	103.3	1.000079
37500.0	213.9	-60.1		349.7	568.7	290.0	109.0	1.000078
38000.0	208.6	-61.1		342.9	567.3	290.4	114.9	1.000076
38500.0	203.8	-62.0		336.2	566.0	290.6	119.8	1.000075
39000.0	198.8	-63.0		329.6	564.8	290.8	124.3	1.000073
39500.0	193.9	-63.8		322.7	563.7	290.3	124.2	1.000072
40000.0	189.2	-64.6		316.0	562.6	289.3	120.9	1.000070
40500.0	184.5	-65.0		309.4	561.2	286.6	109.8	1.000068
41000.0	180.0	-65.5		293.6	560.4	283.2	98.8	1.000065
41500.0	175.7	-66.8		286.8	559.0	279.2	88.7	1.000064
42000.0	171.4	-68.1		280.2	556.7	276.1	87.7	1.000062
42500.0	167.3	-69.3		273.9	558.3	277.1	86.9	1.000061
43000.0	163.2	-70.6		267.5	558.0	277.6	86.5	1.000060
43500.0	159.2	-70.9		261.3	567.6	278.2	90.3	1.000058
44000.0	155.4	-61.1		255.3	567.3	278.7	91.5	1.000057
44500.0	151.6	-61.4		249.4	566.9	279.0	91.7	1.000056
45000.0	147.9	-61.9		243.9	566.2	279.3	91.8	1.000054
45500.0	144.3	-62.6		238.7	565.3	278.8	91.0	1.000053
46000.0	140.6	-62.6		232.9	565.3	278.0	89.9	1.000052
46500.0	137.3	-62.3		226.6	563.7	277.2	88.6	1.000051
47000.0	134.0	-61.9		221.0	566.2	276.4	87.8	1.000049
47500.0	130.7	-61.6		215.7	566.6	275.7	86.7	1.000048
48000.0	127.5	-61.3		209.7	567.0	275.4	84.3	1.000047
48500.0	124.4	-61.2		204.5	567.2	275.6	80.9	1.000046

UPPER AIR DATA
J25001005
WOLLOMAY
TABLE X. (CONT)

STATION ALTITUDE 4120-59 FEET MSL
23 JAN. 70 1700 HRS MST
ASCEN SIG NO. 55

GEODETIC COORDINATES
32.86805 LAT DEG
100.05965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS		WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (TN)	SPED KNOTS	
49000.0	121.4	-51.2		199.5	567.2		275.9	77.5	1.000044
49500.0	116.4	-60.5		194.1	568.0		276.9	72.8	1.000042
50000.0	115.5	-59.9		183.2	568.9		278.2	67.9	1.000042
50500.0	112.7	-60.5		164.6	568.2		279.6	64.4	1.000041
51000.0	110.3	-61.0		180.6	567.5		281.7	62.0	1.000040
51500.0	107.3	-61.5		176.6	566.8		283.5	59.6	1.000039
52000.0	104.7	-62.0		172.1	566.1		284.5	56.8	1.000038
52500.0	102.1	-62.6		168.9	565.4		285.6	54.0	1.000038
53000.0	99.6	-63.1		165.2	564.7		285.0	50.0	1.000037
53500.0	97.2	-63.5		161.4	564.1		284.0	45.8	1.000036
54000.0	94.7	-63.9		157.7	563.5		282.6	43.0	1.000035
54500.0	92.4	-64.3		154.1	563.0		280.9	42.6	1.000034
55000.0	90.1	-64.7		150.6	562.4		279.2	42.2	1.000034
55500.0	87.9	-65.2		147.2	561.8		279.4	43.7	1.000033
56000.0	85.7	-65.6		143.8	561.3		279.7	45.3	1.000032
56500.0	83.6	-66.0		140.5	560.7		280.5	46.4	1.000031
57000.0	81.5	-66.4		137.3	560.1		281.8	47.0	1.000031
57500.0	79.5	-66.9		134.2	559.5		283.0	47.7	1.000030
58000.0	77.5	-66.8		130.8	559.0		284.4	50.5	1.000029
58500.0	75.6	-66.5		127.4	560.0		285.6	53.4	1.000028
59000.0	73.7	-66.2		124.0	560.4		286.2	54.7	1.000028
59500.0	71.8	-65.9		120.7	560.0		286.3	54.7	1.000027
60000.0	70.0	-65.6		117.6	561.2		286.5	54.6	1.000026
60500.0	68.3	-65.4		114.5	561.5		286.3	52.3	1.000025
61000.0	66.6	-65.2		111.6	561.8		285.6	48.2	1.000025
61500.0	65.0	-64.9		108.7	562.1		284.8	44.0	1.000024
62000.0	63.3	-64.7		105.9	562.4		283.7	39.6	1.000024
62500.0	61.6	-64.5		103.1	562.7		281.9	34.7	1.000023
63000.0	60.2	-64.3		100.5	563.0		279.5	29.8	1.000022
63500.0	58.7	-64.1		97.9	563.3		276.3	25.0	1.000022

STATION ALTITUDE +120.59 FEET MSL
25 JAN. 78 1700 HRS MST
ASCENSION NO. 52

UPPER AIR DATA
J250010055
HOLLOMAN
TABLE X. (CONT)

GEODETTIC COORDINATES
32.88865 LAT DEG
106.99965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
64000.0	57.3	-64.0		95.4	563.4	271.7	19.6	1.000021
64500.0	55.9	-64.1		93.1	563.3	263.6	14.4	1.000021
65000.0	54.5	-64.1		90.8	563.3	251.0	10.2	1.000020
65500.0	53.1	-64.1		88.6	563.2	252.1	8.9	1.000020
66000.0	51.8	-64.2		86.4	563.2	253.5	7.7	1.000019
66500.0	50.6	-64.2		84.3	563.2	264.0	6.2	1.000019
67000.0	49.3	-64.1		82.1	563.2	278.4	12.7	1.000018
67500.0	48.1	-63.8		80.0	563.7	285.1	17.5	1.000018
68000.0	46.7	-63.6		78.0	564.0			1.000017
68500.0	45.7	-63.3		75.9	564.2			1.000017
69000.0	44.6	-63.1		74.0	564.7			1.000016

STATION ALTITUDE 4126.59 FEET MSL
23 JAN. 78 1700 HRS MST
ASCENSION NO. 53

MANDATORY LEVELS
025010155
POLLUMAN
TABLE XI.

GEODETIC COORDINATES
32.86865 LAT DEG
106.09965 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	4919.	3.0	-9.4	36.	9999.0	9999.0XX	
800.0	6522.	.2	-11.0	41.	9999.0	9999.0XX	
750.0	8213.	-1.8	-13.3	41.	9999.0	9999.0XX	
700.0	10006.	-4.2	-16.1	39.	328.1	19.2	
650.0	11912.	-6.3	-20.3	32.	329.3	34.1	
600.0	13961.	-8.3	-26.3	22.	322.0	36.9	
550.0	16162.	-11.9	-31.8	17.	316.1	43.2	
500.0	18535.	-16.5	-36.3	10.	302.7	44.6	
450.0	21103.	-22.7	-41.3	10.	303.0	45.0	
400.0	23896.	-30.2	-47.2	17.	293.3	50.9	
350.0	26966.	-37.2	-56.2	12.**	293.1	54.3	
300.0	30407.	-44.6			268.6	55.4	
250.0	34331.	-53.8			289.4	84.5	
200.0	38938.	-62.6			290.8	124.4	
175.0	41645.	-59.8			278.7	88.2	
150.0	44792.	-61.5			275.2	71.6	
125.0	48492.	-61.2			275.7	60.2	
100.0	53036.	-62.0			264.7	48.5	
80.0	57503.	-66.7			263.5	48.0	
70.0	60156.	-65.6			266.5	53.8	
60.0	63241.	-64.3			276.8	25.7	
50.0	66904.	-64.2			280.4	13.8	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.